

**To:** Latham, Michelle[Latham.Michelle@epa.gov]; Mattas-Curry, Lahne[Mattas-Curry.Lahne@epa.gov]; Smith, Emily J.[Smith.Emily@epa.gov]; Linkins, Samantha[Linkins.Samantha@epa.gov]; Impellitteri, Christopher[Impellitteri.Christopher@epa.gov]; Garland, Jay[Garland.Jay@epa.gov]  
**From:** Autrey, Brad  
**Sent:** Tue 1/23/2018 5:44:09 PM  
**Subject:** RE: Sen. Rubio Request for Meeting with Aqua Sciences

Michael Nye has a Net Zero project involving the water condensed from air handler units. We had this brief mention in the September 4-8 NERL Weekly Report.

-Brad

● Net Zero biofilm sampling



During the week of August 21<sup>st</sup>, NERL's Michael Jahne, Dawn King, Nichole Brinkman, and Michael Nye (Systems Exposure Division) collected biofilm samples from air handler units (AHUs) on EPA's RTP campus. The samples were collected in support of the SSWR Net Zero Condensate Analysis Project. And as a part of this project, NERL scientists are working with the Office of Administration and Resources Management (OARM) to sample the condensate water produced by the AHUs in EPA-RTP buildings.

The condensate from AHUs in large buildings is potentially a source of water for certain types of non-potable reuse, such as irrigation. However, very little scientific literature has been published on the quality of this condensate. This project aims to sample and

analyze the condensate to better characterize the water's microbial and chemical quality, and to assess its feasibility as a non-potable water reuse source.

NERL's Kate Helmick (SED, ORISE) has been collecting condensate samples from AHU's around the RTP campus since May. Water quality analysis will be performed by the NERL scientists above and by NERL's Stacy Pfaller (SED) and Kasey Kovalcik (Computational Exposure Division). The results will contribute to the development of a quantitative microbial risk assessment (QRMA) model for non-potable condensate reuse.

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Brad Autrey

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**From:** Latham, Michelle

**Sent:** Tuesday, January 23, 2018 12:13 PM

**To:** Mattas-Curry, Lahne <Mattas-Curry.Lahne@epa.gov>; Smith, Emily J. <Smith.Emily@epa.gov>; Linkins, Samantha <Linkins.Samantha@epa.gov>; Impellitteri, Christopher <Impellitteri.Christopher@epa.gov>; Garland, Jay <Garland.Jay@epa.gov>

**Cc:** Autrey, Brad <Autrey.Brad@epa.gov>

**Subject:** RE: Sen. Rubio Request for Meeting with Aqua Sciences

This work is being led by Chris Impellitteri and Jay Garland.

**From:** Mattas-Curry, Lahne  
**Sent:** Tuesday, January 23, 2018 12:12 PM  
**To:** Smith, Emily J. <[Smith.Emily@epa.gov](mailto:Smith.Emily@epa.gov)>; Linkins, Samantha <[Linkins.Samantha@epa.gov](mailto:Linkins.Samantha@epa.gov)>; Latham, Michelle <[Latham.Michelle@epa.gov](mailto:Latham.Michelle@epa.gov)>  
**Cc:** Autrey, Brad <[Autrey.Brad@epa.gov](mailto:Autrey.Brad@epa.gov)>  
**Subject:** Re: Sen. Rubio Request for Meeting with Aqua Sciences

we do have a general story about to be published in Scio Matters (Maggie has it) on water reuse in general....but ask Jay specifically about the water from air thing....

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**From:** Smith, Emily J.  
**Sent:** Tuesday, January 23, 2018 12:10 PM  
**To:** Linkins, Samantha; Latham, Michelle  
**Cc:** Mattas-Curry, Lahne; Autrey, Brad  
**Subject:** RE: Sen. Rubio Request for Meeting with Aqua Sciences

Hi Sam,

Jay Garland in NERL may be doing work in this area. I'd recommend checking in with him about it. We haven't written anything about it because last I heard, this work seemed to be more in the initial conceptualization stage.

I'm copying Brad Autrey in case he knows more.

-Emily

Emily J. Smith

Communications Director

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E-mail: [smith.emily@epa.gov](mailto:smith.emily@epa.gov)

**From:** Linkins, Samantha

**Sent:** Tuesday, January 23, 2018 12:05 PM

**To:** Latham, Michelle <[Latham.Michelle@epa.gov](mailto:Latham.Michelle@epa.gov)>; Smith, Emily J. <[Smith.Emily@epa.gov](mailto:Smith.Emily@epa.gov)>

**Cc:** Mattas-Curry, Lahne <[Mattas-Curry.Lahne@epa.gov](mailto:Mattas-Curry.Lahne@epa.gov)>

**Subject:** FW: Sen. Rubio Request for Meeting with Aqua Sciences

Hey Michelle and Emily,

A company in Sen Rubio's district requested a meeting with EPA. They are generating water from the atmosphere. I'm guessing their main concern is funding (so I'll send some SBIR info their way), but I was wondering if we have any experts on this. Lahne suggested it could be part of the water reuse/water capture stuff, but wasn't sure. Do you know of any work we're doing in this area/any experts that could provide useful technical information to the company?

-Sam

Samantha Linkins

Science Communication Specialist and Congressional Lead

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Cell: 202-604-5742

**From:** Mattas-Curry, Lahne  
**Sent:** Tuesday, January 23, 2018 11:57 AM  
**To:** Linkins, Samantha <[Linkins.Samantha@epa.gov](mailto:Linkins.Samantha@epa.gov)>  
**Subject:** Re: Sen. Rubio Request for Meeting with Aqua Sciences

Let's ask Emily Smith and Michelle Latham - I am not sure how in depth the water reuse program goes into water capture.

I feel like it could be part of that, but might not be broadly one of our areas yet, but water reuse IS!

Perhaps we could share the water reuse info though anyway.....

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**From:** Linkins, Samantha  
**Sent:** Tuesday, January 23, 2018 11:55 AM  
**To:** Mattas-Curry, Lahne  
**Subject:** FW: Sen. Rubio Request for Meeting with Aqua Sciences

Do we have any folks that do stuff on generating water from the air? I doubt it, but thought I'd ask. (I think all we can really do is just send them SBIR info.)

Samantha Linkins

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**From:** Moody, Christina  
**Sent:** Tuesday, January 23, 2018 11:51 AM  
**To:** Linkins, Samantha <[Linkins.Samantha@epa.gov](mailto:Linkins.Samantha@epa.gov)>  
**Cc:** Williams, Thea <[Williams.Thea@epa.gov](mailto:Williams.Thea@epa.gov)>  
**Subject:** FW: Sen. Rubio Request for Meeting with Aqua Sciences

Sam,

Can you forward this request onto the right POCs in ORD to set up a meeting with these constituents? Please see the email below.

Thanks,

Christina J. Moody

US Environmental Protection Agency

Office of Congressional Affairs & Intergovernmental Relations

[Moody.Christina@epa.gov](mailto:Moody.Christina@epa.gov)

**From:** Kaiser, Sven-Erik  
**Sent:** Tuesday, January 23, 2018 11:40 AM  
**To:** Moody, Christina <[Moody.Christina@epa.gov](mailto:Moody.Christina@epa.gov)>  
**Subject:** FW: Sen. Rubio Request for Meeting with Aqua Sciences

Christina – please take a look at the request below for someone at EPA to meet with a Rubio constituent on their technology. We checked with OW and it looks like this is more of an ORD topic. Thoughts? Thanks,

Sven

Sven-Erik Kaiser

U.S. EPA

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202-566-2753 (o)

202-591-0619 (c)

**From:** Borum, Denis

**Sent:** Thursday, January 18, 2018 5:42 PM

**To:** Kaiser, Sven-Erik <[Kaiser.Sven-Erik@epa.gov](mailto:Kaiser.Sven-Erik@epa.gov)>

**Subject:** RE: Sen. Rubio Request for Meeting with Aqua Sciences

Hi, Sven –

After checking into this, it's not an OW-specific program issue. Rather, it's a R&D concept for a technology that would generate water out of the atmosphere. As Sen. Rubio's staffer indicates, Water-Gen has already established a working connection with EPA – specifically with ORD. Thus, since Aqua Sciences has the same technological idea, they too should approach ORD directly. Can you send this meeting request on to Christina's team?

For your/Christina's benefit, I understand that the main POCs on the Water-Gen interaction are with ORD-HERL, specifically Tim Watkins and Jay Garland in RTP. Not sure who in HQ is best.

Thank you

Denis

Denis R. Borum

Congressional Liaison Specialist

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**From:** Kaiser, Sven-Erik

**Sent:** Wednesday, January 17, 2018 6:52 PM

**To:** Brooks, Wes (Rubio) <[Wes\\_Brooks@rubio.senate.gov](mailto:Wes_Brooks@rubio.senate.gov)>

**Cc:** Palich, Christian <[palich.christian@epa.gov](mailto:palich.christian@epa.gov)>; Valanos, Eleni (Rubio) <[Eleni\\_Valanos@rubio.senate.gov](mailto:Eleni_Valanos@rubio.senate.gov)>; Borum, Denis <[Borum.Denis@epa.gov](mailto:Borum.Denis@epa.gov)>; Klasen, Matthew <[Klasen.Matthew@epa.gov](mailto:Klasen.Matthew@epa.gov)>

**Subject:** Re: Sen. Rubio Request for Meeting with Aqua Sciences

Got it



On Jan 17, 2018, at 6:24 PM, Brooks, Wes (Rubio) <[Wes\\_Brooks@rubio.senate.gov](mailto:Wes_Brooks@rubio.senate.gov)> wrote:

I think at EPA would be best. We just want to help set up the opportunity as they are doing some neat stuff, but don't need to be present.

Best regards,

Wes

**Wesley R. Brooks, Ph.D.**

Legislative Assistant

Office of U.S. Senator Marco Rubio

284 Russell Senate Office Bldg

202-224-3041

**From:** Kaiser, Sven-Erik [<mailto:Kaiser.Sven-Erik@epa.gov>]

**Sent:** Wednesday, January 17, 2018 1:43 PM

**To:** Brooks, Wes (Rubio) <[Wes\\_Brooks@rubio.senate.gov](mailto:Wes_Brooks@rubio.senate.gov)>; Palich, Christian <[palich.christian@epa.gov](mailto:palich.christian@epa.gov)>; Valanos, Eleni (Rubio) <[Eleni\\_Valanos@rubio.senate.gov](mailto:Eleni_Valanos@rubio.senate.gov)>; Borum, Denis <[Borum.Denis@epa.gov](mailto:Borum.Denis@epa.gov)>; Klasen, Matthew <[Klasen.Matthew@epa.gov](mailto:Klasen.Matthew@epa.gov)>

**Subject:** Sen. Rubio Request for Meeting with Aqua Sciences

Wes – thanks for the request. Looping in my colleague Denis Borum to facilitate setting up a meeting with Aqua Sciences. Were you thinking in your offices or at EPA? Please let me know if any additional questions. Best,  
Sven

Sven-Erik Kaiser

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**From:** Brooks, Wes (Rubio) [[mailto:Wes\\_Brooks@rubio.senate.gov](mailto:Wes_Brooks@rubio.senate.gov)]  
**Sent:** Wednesday, January 17, 2018 1:27 PM  
**To:** Kaiser, Sven-Erik <[Kaiser.Sven-Erik@epa.gov](mailto:Kaiser.Sven-Erik@epa.gov)>  
**Cc:** Palich, Christian <[palich.christian@epa.gov](mailto:palich.christian@epa.gov)>; Valanos, Eleni (Rubio) <[Eleni\\_Valanos@rubio.senate.gov](mailto:Eleni_Valanos@rubio.senate.gov)>  
**Subject:** Meeting for drinking water solutions

Gentlemen:

We have two companies based in Florida that have different technologies for collecting potable water from the atmosphere that are exploring potential contract opportunities with the U.S. government. They have asked our office for assistance in connecting them with appropriate contacts within various federal agencies who would be able to meet with them so they can outline the benefits and performance of their technologies and see if there were potential opportunities to work to further the agency mission. The companies are Water-Gen (whom I believe has already secured meetings with EPA) and Aqua Sciences (who has not).

One of the lead investors for Aqua Sciences will be in town the week of Feb. 5<sup>th</sup>, and would like to meet with the appropriate folks from EPA during his trip to DC. Is there any way to help arrange that? What would be the best way to proceed?

Best regards,

Wes

**Wesley R. Brooks, Ph.D.**

Legislative Assistant

Office of U.S. Senator Marco Rubio

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